

# Converting Colors

CIELCh(46, 17.985, 122.316)

Have a look what the booklet for  
CIELCh(46, 17.985, 122.316)  
contains.

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# Color

**CIELCh(46, 18.137, 121.662)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	677153
RGB	103, 113, 83
RGB Percent	40%, 44%, 33%
CMY	0.5967, 0.5575, 0.6751
CMYK	0.09, 0.00, 0.27, 0.56
HSL	80°, 15%, 38%
HSV	80°, 27%, 44%
XYZ	13.0160, 15.2687, 10.4124
YIQ	106.5900, 3.6700, -11.4500

# Conversions

## Conversions Part 2

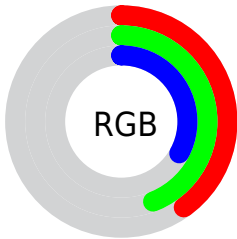
<b>Format</b>	<b>Color</b>
<b>RYB</b>	83, 113, 93
Decimal	6779219
CIELab	46.00, -9.52, 15.44
CIElCh	46, 18.137, 121.662
Yxy	15.2687, 0.3364, 0.3946
Android (android.graphics.Color)	4284969299 (0xFF677153)
YUV	106.5900, -11.6299, -3.1484
Hunter-Lab	39.0751, -8.9227, 11.5535

# Details

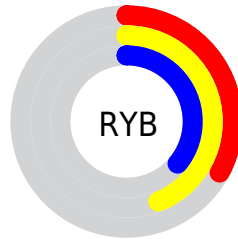
The CIELCh color  $46, 18.137, 121.662$  is a dark color, and the websafe version is hex  $666633$ . A complement of this color would be  $37, 19.018, 304.614$ , and the grayscale version is  $45, 0.006, 296.813$ .

A 20% lighter version of the original color is  $66, 18.131, 122.410$ , and  $26, 17.831, 121.040$  is the 20% darker color. If you saturate the color by 10%, you get  $45, 24.831, 121.138$ , and if you desaturate by 10%, it is  $47, 11.343, 122.199$ .

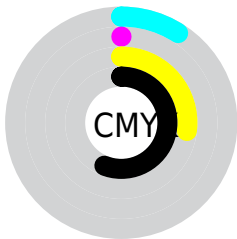
# Distribution



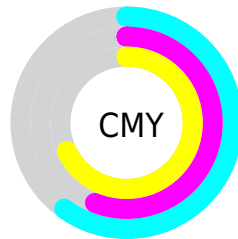
- Red (40%)
- Green (44%)
- Blue (33%)



- Red (33%)
- Yellow (44%)
- Blue (36%)



- Cyan (9%)
- Magenta (0%)
- Yellow (27%)
- Black (56%)



- Cyan (60%)
- Magenta (56%)
- Yellow (68%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 46, 18.137, 121.662 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.


Similar to the brightness gradients but the following saturation gradients show a change of the CIELCh color 46, 18.137, 121.662 by changing the saturation by 10% instead.




 46, 18.137,  
121.662


 46, 18.137,  
121.662


 100, 18.137,  
121.662

 36, 18.137,  
121.662

 66, 18.137,  
121.662

 26, 18.137,  
121.662

 76, 18.137,  
121.662

 16, 18.137,  
121.662


 86, 18.137,  
121.662

 6, 18.137, 121.662

 96, 18.137,  
121.662

 0, 18.137, 121.662

 46, 18.137,

 46, 18.137,

121.662

121.662

■ 45, 24.831,  
121.138

■ 47, 11.343,  
122.199

■ 45, 31.337,  
120.646

■ 47, 4.502, 122.727

■ 45, 37.538,  
120.227

■ 48, 2.345, 303.204

■ 48, 9.168, 303.693

■ 44, 43.259,  
119.939

■ 49, 15.947,  
304.142

■ 44, 48.267,  
119.863

■ 50, 22.666,  
304.559

■ 44, 52.286,  
120.097

■ 51, 29.314,  
304.944

■ 43, 55.313,  
120.634

■ 52, 35.882,  
305.299

■ 43, 56.349,  
120.789

■ 52, 42.364,



# Harmonies

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



46, 18.137, 121.662



37, 19.018, 304.614

# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



46, 18.137, 121.662



46, 18.137, 171.662



46, 18.137, 301.662



46, 18.137, 351.662

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



46, 18.138, 121.664



61, 6.832, 122.641



41, 10.888, 53.769



31, 4.825, 122.576



81, 0.010, 296.813



31, 0.005, 296.813





# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



46, 18.138, 121.664



59, 27.177, 121.332



45, 20.713, 138.458



23, 3.830, 122.600



46, 58.867, 120.886



89, 101.122, 121.733



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



37, 19.018, 304.614



46, 28.858, 305.054



39, 20.909, 320.941



21, 3.894, 303.522



14, 73.523, 309.160



35, 126.422, 308.614



# Previews

## White Background



This preview shows how the CIELCh color 46, 18.137, 121.662 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

# Black Background



This preview shows how the CIELCh color 46, 18.137, 121.662 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

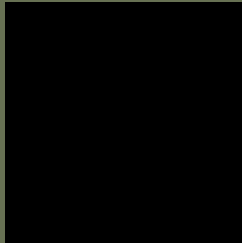
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 46, 18.137, 121.662**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 46, 18.137, 121.662.



This preview shows how white text looks on a background with the CIELCh color 46, 18.137, 121.662.

# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

46, 18.137, 121.662


### Protanopia

46, 16.883, 95.549

### Deuteranopia

46, 15.439, 66.430





**Tritanopia**  
46, 5.356, 290.926

# Trichromacy



**Original Color**  
46, 18.137, 121.662

**Protanomaly**  
46, 16.486, 104.758

**Deuteranomaly**  
46, 14.489, 88.396

**Tritanomaly**  
46, 3.403, 138.660

# Monochromacy



**Original Color**  
46, 18.137, 121.662

**Achromatopsia**  
45, 0.006, 296.813

**Achromatomaly**  
45, 6.078, 121.311

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 46, 18.137, 121.662 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(103, 113, 83)` looks like.

```
.text, #text, p{  
    color:rgb(103, 113, 83)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(103, 113, 83) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(103, 113, 83) }
```

## Border

The CSS property to change the border of an element to CIELCh 46, 18.137, 121.662 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(103, 113, 83) }
```

If only the border color should be changed use the property `border-color`.

```
.border{ border-color:rgb(103, 113, 83) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel `rgb(103, 113, 83)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(103, 113, 83); -webkit-box-  
shadow:4px 4px 4px 4px rgb(103, 113, 83);  
box-shadow:4px 4px 4px 4px rgb(103, 113,  
83) }
```

# Background

The CSS property to change the background color of an element to CIELCh 46, 18.137, 121.662 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(103, 113, 83) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(103,  
113, 83) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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